



UNIVERSITI PUTRA MALAYSIA

**THE ROLE OF EMAIL IN IMPROVING TASK PERFORMANCE
AMONG EXECUTIVES AT MULTIMEDIA UNIVERSITY, MALAYSIA**

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**THE ROLE OF EMAIL IN IMPROVING TASK PERFORMANCE AMONG
EXECUTIVES AT MULTIMEDIA UNIVERSITY, MALAYSIA**

By

NARGES BANINAJARIAN

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirement for the Degree of Master of
Science**

July 2009



I wish to dedicate this thesis to my beloved family; my father, my mother, Leila, Reza, Mehdi, Sogol and my husband Mohammad who always understand and give me loving support.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Master of Science

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Faculty: Modern Languages and Communication

Nowadays, one of the most widely used of communication technologies in organization is email. Email expands the communication capabilities that available to employees and in some cases, replaces traditional media such as paper documents, telephone calls, and face-to-face communication. In Malaysia, a large number of high-tech companies have established to promote the Multimedia Super Corridor project. Thus, the assessment of the use and effect of communication technologies in these organizations seems to be relevant. This study aims to examine whether email use has a significant effect on task performance. Specifically, this study attempts to look at how email richness and email ease of use can affect task performance which is determined in four components: decision time, decision quality, consensus, and communication satisfaction.



The present study used a survey design to achieve the objectives of the study. Purposive sampling was used to select a total of 239 executives of different faculties and divisions in the Multimedia University. The study used self-administered structured questionnaires as the research instrument. Statistical analyses used in this study were the Chi-Square and Spearman's Rho Correlation.

This study revealed that the executives experienced moderate to high level of task performance while using email. There were no significant differences in task performance among respondents based on gender, race, age, education level, position, and work experience categories. The results showed that the executives perceived email in moderate to high level in richness while they perceived email as an easy to use communication medium. The present study has confirmed that email richness and email ease of use have positively significant relationship with task performance. It is indicated that the increase in email richness and email ease of use perception generates an increase in task performance. In terms of email richness, the findings of this study challenge previous studies. It can be concluded that the respondents of this study perceived email as a rich medium and it is a convenient way for them to make decisions. But, for email ease of use, as previous studies, the more email is perceived easy to use causes the increasing in task performance. Future studies may focus on the role of new communication technologies in other dimensions of organizational concerns such as social or corporate performance.

Abstrak tesis yang dikemukakan kepada senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Sarjana Sains

**PERANAN EMAIL DALAM MENINGKATKAN PRESTASI KERJA DI
KALANGAN EKSEKUTIF DI UNIVERSITI MULTIMEDIA, MALAYSIA**

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Dewasa ini, salah satu cara yang digunakan secara meluas di dalam teknologi komunikasi organisasi ialah email. Email memperluaskan lagi keupayaan komunikasi yang boleh didapati oleh pekerja dan di dalam sesetengah kes menggantikan media tradisional seperti dokumen kertas, panggilan telefon dan komunikasi bersemuka. Di Malaysia, sejajar dengan projek Koridor Raya Multimedia, sejumlah besar syarikat dan organisasi berteknologi tinggi mula dibangunkan. Oleh itu penilaian terhadap penggunaan dan kesan teknologi komunikasi di dalam organisasi-organisasi ini adalah relevan.

Kajian ini bertujuan untuk menilai adakah penggunaan email memberi kesan yang signifikan terhadap prestasi kerja. Secara spesifik, kajian ini berhasrat untuk memperhalusi bagaimanakah pengkayaan email dan kemudahan penggunaannya boleh mempengaruhi prestasi kerja yang dinilai melalui

empat komponen iaitu masa keputusan, kualiti keputusan, konsensus dan kepuasan komunikasi.

Kajian yang dijalankan pada masa ini menggunakan rekabentuk tinjauan bagi mencapai objektif kajian. Persampelan bertujuan digunakan untuk memilih sejumlah 239 eksekutif di fakulti dan bahagian yang berbeza di Universiti Multimedia. Kajian ini juga menggunakan soalan soal selidik tersusun kendalian sendiri sebagai instrumen penyelidikan. Analisis statistik yang digunakan adalah Chi-square dan korelasi Spearman's Rho.

Kajian ini menunjukkan bahawa para eksekutif mengalami tahap sederhana kepada tahap tinggi prestasi kerja semasa menggunakan email. Tiada perbezaan signifikan pada prestasi kerja di kalangan responden berdasarkan jantina, bangsa, umur, tahap pendidikan, jawatan dan kategori pengalaman kerja. Keputusan menunjukkan bahawa para eksekutif menganggap email pada tahap sederhana kepada tahap tinggi di dalam pengkayaan sementara menganggap email sebagai cara komunikasi yang mudah untuk digunakan adalah sederhana. Penerimaan pengkayaan email dan penerimaan email sebagai kemudahan menunjukkan hubungan signifikan yang positif dengan prestasi kerja. Berkaitan dengan pengkayaan email, kajian lepas, mendapati responden menggunakan email sebagai perantaraan untuk membuat keputusan bagi tugas pejabat mereka. Manakala, kajian yang dilakukan mendapati kemudahan email akan menyebabkan peningkatan prestasi kerja. Kajian masa depan disarankan menghasilkan tentang peranan teknologi komunikasi baru dalam dimensi organisasi seperti prestasi sosial atau korporat.

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I certify that a Thesis Examination Committee has met on 17 July 2009 to conduct the final examination of Narges Bani Najarian on her thesis entitled "The Role of Email in Improving Task Performance Among Executives at Multimedia University, Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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DECLARATION

I declare that the thesis is my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



NARGES BANINAJARIAN

Date: 30/9/2009

TABLE OF CONTENTS

	Page
DEDICATION	ii
ABSTRACT	iii
ABSTRAK	v
ACKNOWLEDGEMENTS	vii
APPROVAL	viii
DECLARATION	x
LIST OF TABLES	xiv
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS	xvii

CHAPTER

1	INTRODUCTION	1
	1.1 Background of the Study	1
	1.2 Problem Statement	7
	1.3 Objectives of the Study	10
	1.4 Significance of the Study	11
	1.5 Limitations of the Study	12
	1.6 Definition of Terms	13
2	LITERATURE REVIEW	14
	2.1 Perspectives on Organizational Communication	14
	2.2 Effects of Communication Technologies on Organizational Communication	17
	2.3 Definition of Email	19
	2.4 Past Research Findings	23
	2.4.1 Media Choice in Organization	23
	2.4.2 Task Performance and Media Usage	30
	2.5 Researches on New Communication Technology in Malaysia	33
	2.6 Media Richness Theory	35
	2.7 Statements of Hypothesis	38
	2.8 Research Framework of the Study	39
3	RESEARCH METHODOLOGY	41
	3.1 Research Design	41



3.2	Research Location	42
3.3	Population and Sample	43
3.4	Research Instrument	47
3.5	Conceptualization and Measurement of Research Variables	49
3.5.1	Dependent Variable	50
3.5.2	Independent Variables	53
3.6	The Pre-test of the Instrument	57
3.7	Reliability of the Scale	57
3.8	Data Collection	58
3.9	Data Analysis	59
3.10	Level of Significance	61
4	RESULTS AND DISCUSSIONS	62
4.1	Profile of Respondents	62
4.1.1	Gender, Race, and Age	62
4.1.2	Position, Work Experience, and Educational Attainment	63
4.2	Email Usage Pattern	65
4.2.1	Number of Years Using Email, and Frequency of Using MMU Email, Receiving and Sending Email	66
4.2.2	Rating Communication Media in Formal and Informal Decision Making	68
4.3	The Level of Task Performance	69
4.4	User Characteristics and Task Performance	75
4.5	The Extent of Perceived Email Richness and Perceived Email Ease of Use	79
4.5.1	The Level of Perceived Email Richness	79
4.5.2	The Level of Perceived Email Ease of Use	83
4.6	Relationship between Perceived Email Richness and Task Performance	87
4.7	Relationship between Perceived Email Ease of Use and Task Performance	87
4.8	Hypothesis Testing	88
4.9	Conclusion	89
5	Summary and Conclusion	92
5.1	Summary	92
5.1.1	Problem Statement	92
5.1.2	Objectives of the Study	94
5.1.3	Methodology of the Study	94

5.1.4	Findings	95
5.1.5	Discussion on the Findings	97
5.2	Implications	98
5.2.1	Implications for Theoretical Perspective	99
5.2.2	Implications for Practical Perspective	100
5.3	Recommendations for Future Research	102
REFERENCES		103
APPENDICES		111
BIODATA OF STUDENT		122
LIST OF PUBLICATIONS		123

LIST OF TABLES

Table		Page
3.1	The Total Number of Faculties, Divisions, Population, and Sample in Multimedia University	44
3.2	Number of Items, Positive, and Negative Items by Dimensions of Independent and Dependent Variables	49
3.3	Number of Items and Reliability Coefficient of Variables in Pre-test of Study	58
4.1	Distribution of Respondents by Selected Demographic Characteristics	63
4.2	Distribution of Respondents by Position, Work Experience, and Educational Attainment	64
4.3	Distribution of Respondents by Email Usage Pattern	67
4.4	Distribution of Respondents by Rating Communication Media in Formal and Informal Decision Making	69
4.5	The level of task performance of respondents	70
4.6	Mean and Standard Deviations of the Task Performance Items by Dimensions	72
4.7	Chi-Square Test for the Level of Task Performance by User Characteristics	76
4.8	The Extent of Perceived Email Richness of Respondents	79
4.9	Mean and Standard Deviations of the Perceived Email Richness Items by Dimensions	81
4.10	The Extent of Perceived Email Ease of Use of Respondents	84
4.11	Mean and Standard Deviations of the Perceived Email Ease of Use Items by Dimensions	85

4.12	Spearman's Rho Correlation for Perceived Email Richness and Task Performance	87
4.13	Spearman's Rho Correlation for Perceived Email Ease of Use and Task Performance	88



LIST OF FIGURES

Figure		Page
2.1	Hierarchy of Media Richness	38
2.2	Research Framework of the Study	40
4.1	Summary of Correlation between Task Performance and Email Use	91

LIST OF ABBREVIATIONS

EMA	Electronic Messaging Association
IT	Information Technology
ICT	Information and Communication Technologies
NITA	National Information Technology Agenda
MSC	Multimedia Super Corridor
KLCC	Kuala Lumpur City Centre
KLIA	Kuala Lumpur International Airport
R & D	Research and Development
MMU	Multimedia University
CMC	Computer-Mediated Communication
TAM	Technology Acceptance Model
MRT	Media Richness Theory
SPSS	Statistical Package for Social Sciences
U. S.	United States
CSCW	Computer-Supported Cooperative Work

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Communication has nowadays become one of the most important assets in organizations. This is because organizations cannot be considered just as containers of individuals with common goals, but has to be considered as evolving social contexts in which real persons face various situations and problems.

People in organization are able to maintain an effective relationship to achieve their aims. Effective communication help organizations make decisions, solve problems, share information and help employees work well together. It can make employees feel more connected to the organization. Relationships and interactions with co-workers and supervisors affect their performance and also the effectiveness of organization.

Traditionally, employees have relied on face-to-face communication, phone or written correspondence to communicate in relationships with their co-workers and managers. But over 100 past years, many changes have taken place in workplace communication (Zumd *et al.*, 1990). In recent years, with the development of new technologies, we have moved from handwriting to typing and word processing to create a simple written document. To produce multiple copies of that document, we have moved from copying the document

by hand to carbon paper to high speed coping machine. To exchange messages over long distances we have moved from messengers to telegraph to telephone to voice mail and electronic mail. However, the workplace at the turn of the 21st century will bear little resemblance to the workplace of 100 years ago, and many of the workplace changes are the result of technological innovations (Miller, 2006).

According to Langan-Fox (2001), technological innovations in computers and telecommunications have created a wide array of new communication media. For organizations, this represents opportunities to overcome communication problems and to enhance the productivity of organizational members.

Due to the advent of new communication media, Miller (2006) noted a number of characteristics pertaining to these new technologies. First, many of these technologies allow faster message transmission. Second, these new technologies permit communication among geographically dispersed participants. Third, these new technologies allow asynchronous communication between individuals at different points in time. In summary, communication technologies offer organizational participants a wide array of interaction that substantially differ from traditional way of working by allowing faster communication especially for distantly located participants at different points of time.

With these different characteristics, the effects of these new communication technologies in organizations can be classified to three levels (Bouwman, *et al.*, 2005):

- Effects at an individual level: the individual employee and his task, the degree to which the tasks of individual members of an organization can be made more (or perhaps less) efficient.
- Effects at an organizational level: the significance of these new communication technologies to the organizational structure, the design and implementation of business process (both within and between organizations), in terms of efficiency, effectiveness and innovation.
- Effects at the level of the environment within which organizations operate and the relationships between organizations and their environment.

According to Langan-Fox (2001), among new communication technologies, email has perhaps achieved the most widespread acceptance in organizations. Email is defined as a computer system for the exchange of messages and other information that may include text and numerical data, computer programs, video, graphics, and sound (Kettinger and Groven, 1997). Email is a form of information interchange in which messages are sent from one personal computer to another via modems and telecommunication systems (Anderson *et al.*, 1995). Hence, email can be used to send simple

messages to targeted individuals, broadcast information to a large organizational group, chat with collaborators across the country or world and exchange and revise long and complex documents (Miller, 2006).

The use of email has grown greatly since it first traversed the Arpanet in 1969. The Electronic Messaging Association (EMA) estimated that as many as 30 to 50 million people use email worldwide (Pavlik, 1998). Additionally, according to the research conducted by industrial analysts in the United States, the number of email users worldwide is estimated to increase from 1.2 billion in 2007 to 1.6 billion in 2011 (Radicati Group, 2007).

Using email in organizations improves effectiveness, efficiency, productivity, and enhances greater communication. Email use can reduce the use of papers, remove time delays, allows the sender to convey messages to a list of specific individuals, and overcomes physical and situational factors associated with face-to-face communication, scheduled meetings, and scattered work environments. Email can help prevent task fragmentation. Individuals can send, receive messages, and respond when it is more convenient and they are more prepared. Overall, email saves time and money, enhances communications, and facilitates rapid cooperation (Ratchukool, 2001).

There are many research studies on email communication either by descriptive analysis or theoretical approach in western countries. The theoretical approach helped to predict the relationship between tasks and

technology whereas descriptive studies assisted to document the use of email (Dennis *et al.*, 1999). In media richness theory, email was considered less rich in cue variety, immediate feedback, and message personalization compared to other communication media in equivocal situations (Lee, 1994; Trevino *et al.*, 1990). In social presence theory, social use such as sociability, warmth, and sensitivity affected the degree of use (Short *et al.*, 1976). Other studies on email included the perceived ease of use and its usefulness, accessibility, the relationship between gender, communication environment, and email use (Gefen and Straub, 1997, Straub *et al.*, 1997).

Media richness theory stated that the context of the task is related to the selection of a form of information technology. Some tasks were very routine, technical, formal, and well defined and could be conveyed via a less rich communication channel such as written memos or letters. Other tasks were more ambiguous, more social, and conveyed more emotion. These tasks usually required more personal involvement, in this case face-to-face meeting or a telephone conversation was preferred more to convey the multiple cues of the message. Thus, the selection of a communication channel was influenced by both the characteristics of the task and the interaction of the characteristics with the attributes of the information technology.

In Malaysia, information technology (IT) is recognized as a strategic technology for long term development. This is clearly stated in vision 2020 where Malaysia's statement of national goals clearly formulates the country's

objective for a developed-nation status while moving towards the formation of an information-rich society (Raman and Yap, 1996).

The Malaysian internet age began in 1995. The growth in the number of Internet hosts in Malaysia started around 1996. According to the first Malaysian Internet survey conducted from October to November 1995 by MIMOS and Beta Interactive Services, one out of every thousand Malaysians had access to the Internet (20,000 Internet users out of a population of 20 million) (Paynter and Lim, 2001).

In a survey conducted by the Energy, Communications and Multimedia Ministry (Lee, 2000), it was reported that 7% of the population was registered as Internet subscribers compared to only 2.6% in the previous year. The Internet penetration is still low at less than 10 percent of the population. According to International Data Corporation (IDC) Malaysia, the number is estimated to grow to 3.91 million in 2004. It is hard to determine an actual figure of online users in Malaysia, as some of the online users are not registered as Internet subscribers; they assess the Internet at their workplace or through Internet cafés.

Based on the above discussion, email was chosen in this study because it is one of the best examples of widely used communication technology in Malaysia and is growing in importance. Therefore, the effects of email use at an individual level was assessed in this study and also attempted to

determine the roles of email in improving task performance among Multimedia University (MMU) executives.

1.2 Problem Statement

As mentioned before, the introduction of new information and communication technologies (ICT) has created new possibilities for human beings. Under the Eighth Malaysia Plan (2001-2005), RM 5.2 billion has been allocated to the ICT sector. This market is growing at 10 per cent with major expenditure coming from the banking and finance, manufacturing, government and telecommunications sectors.

According to the International Telecommunication Union, there were almost nine million Malaysians using Internet in 2003 comprising about 62% of the adult population. Internet usage will continue to grow rapidly, although broadband access is an issue and generally only rolled out in metropolitan areas. It is currently being addressed by the Malaysian Government.

The Malaysia vision 2020 was first formulated in 1991; a thirty- year program envisages the creation of a civil society in Malaysia. A civil society in the context of IT will ensure that all Malaysians have access to information and learning through the established info-structure for personal, organizational, and national advancement.